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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/910,232

07/20/2001

Herbert Peiffer

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1656

7590

08/06/2003

ProPat L.L.C.

Attention: Klaus Schweitzer

Crosby Building

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Charlotte, NC 28211

EXAMINER

CHEN, VIVIAN

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 08/06/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/910,232	Applicant(s) PEIFFER ET AL.	
	Examiner Vivian Chen	Art Unit 1773	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003 and 30 June 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4 and 6-15 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

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### **DETAILED ACTION**

1. Claim 2 has been cancelled.
2. The finality of the rejections of Paper No. 8 (mailed 2/28/2003) is hereby withdrawn in view of newly discovered prior art and in view of Applicant's arguments regarding the confusion caused by typographical errors.

#### ***Claim Rejections - 35 USC § 112***

3. The rejections under 35 USC 112, second paragraph, in paragraph 3 of the previous Office Action has been withdrawn in view of Applicant's amendments filed 6/27/2003.

#### ***Terminal Disclaimer***

4. The terminal disclaimer filed on 12/16/2002 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Serial Nos. 09/922,675 and 09/922,615 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. The obviousness-type double patenting based on U.S. Serial Nos. 09/922,675 and 09/922,615 in paragraph 2 of the previous Office action mailed 7/16/2002 has been withdrawn in view of the Terminal Disclaimer filed 12/16/2002.

7. Claims 1, 3-4, 6-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

claims 1-23 of copending Application No. 09/274,781 (PEIFFER ET AL); or

claims 1-20 of copending Application No. 09/274,772 (PEIFFER ET AL);

in view of PEIFFER ET AL (US 5,955,181).

The above copending Applications each claim a multilayer polyester film having a base layer, an outer layer of the recited PEN and PET content, layers with the relative Tg values, oxygen permeability, additional coatings, metallization, and/or other features as recited in application claims 1-2, 4, 7-15. Features not explicitly claimed in the copending Application (e.g., films with the recited relative layer weight) are either suggested by the secondary reference and/or are obvious to one of ordinary skill in the art.

PEIFFER ET AL '181 discloses that it is well known in the art to make biaxially oriented multilayer polyester films with PEN-containing outer layers, wherein the base layer comprises the major portion of the overall film thickness (lines 26-43, col. 7) as recited in application claims 1, 3 in order to minimize material costs and/or obtain specific mechanical properties. The reference further discloses the following conventional, well known features used with and/or incorporated into such films: the use of intermediate layers between the PEN-containing outer layer and the base layer (application claim 6-8); the use of a second, different type of outer layer (application claims 7-8); the use of pigments (application claim 9); the use of corona discharge for surface treatment (application claim 10); the use of inline coating (application claim 11); the metallization of the resultant film (application claim 12); a conventional method of making an biaxially oriented multilayer polyester film (application claims 13-14); and the use of regrind material (application claim 15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust the relative thicknesses of the layers of the film claimed in the above copending Application as indicated in claims 1, 3 depending on the specific mechanical, barrier, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. It also would have been obvious to incorporate conventional features into the film and to use conventional methods to form and post-treat the film in order to obtain specific mechanical, optical, or other physical properties desired for a given application.

This is a provisional obviousness-type double patenting rejection.

8. Claims 1, 3-4, 6-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

claims 1-17 of U.S. Patent No. 6,054,212 (PEIFFER ET AL); or

claims 1-22 of U.S. Patent No. 6,149,995 (PEIFFER ET AL); or

claims 1-20 of U.S. Patent No. 6,391,410 (PEIFFER ET AL); or

claims 1-18 of U.S. Patent No. 6,428,882 (PEIFFER ET AL); or

claims 1-25 of U.S. Patent No. 6,565,936 (PEIFFER ET AL); or

claims 1-17 of U.S. Patent No. 6,537,647 (PEIFFER ET AL);

in view of PEIFFER ET AL (US 5,955,181).

Patent Nos. 6,391,410 and 6,149,995 (PEIFFER ET AL) each claim multilayer polyester films having a base layer, an outer layer of the recited PEN and PET content, layers with the relative Tg values, and other features such as oxygen permeability as recited in application claims 1, 4, 6-15, wherein the films are further coated and/or metallized. Features not explicitly claimed in the above patents (e.g., films with the recited relative layer weight) are either suggested by the secondary reference and/or are obvious to one of ordinary skill in the art.

PEIFFER ET AL '181 discloses that it is well known in the art to make biaxially oriented multilayer polyester films with PEN-containing outer layers, wherein the base layer comprises the major portion of the overall film thickness (lines 26-43, col. 7) as recited in application claims 1, 3 in order to minimize material costs and/or obtain specific mechanical properties. The reference further discloses the following conventional, well known features used with and/or incorporated into such films: the use of intermediate layers between the PEN-containing outer layer and the base layer (application claim 6-8); the use of a second, different type of outer layer

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(application claims 7-8); the use of pigments (application claim 9); the use of corona discharge for surface treatment (application claim 10); the use of inline coating (application claim 11); the metallization of the resultant film (application claim 12); a conventional method of making an biaxially oriented multilayer polyester film (application claims 13-14); and the use of regrind material (application claim 15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust the relative thicknesses of the layers of the film claimed in the above patents as indicated in claims 1, 3 depending on the specific mechanical, barrier, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. It also would have been obvious to incorporate conventional features into the film and to use conventional methods to form and post-treat the film in order to obtain specific mechanical, optical, or other physical properties desired for a given application.

Regarding U.S. Patent No. 6,565,936, one of ordinary skill in the art would have selected the PEN content and thicknesses of the film layers, in addition to other barrier enhancing techniques, in order to obtain the necessary oxygen barrier properties for a specific usage.

9. Claims 1, 3-4, 6-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over U.S. Patent No. 5,955,181 (PEIFFER ET AL).

PEIFFER ET AL '181 claims a multilayer polyester film having a base layer, an outer layer of the recited PEN and PET content, and layers with the relative Tg values as recited in application claims 1, 3. The patent further claims other features used with and/or incorporated into such films: the use of corona discharge for surface treatment (application claim 10); the use

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of inline coating (application claim 11); the metallization of the resultant film (application claim 12); a conventional method of making an biaxially oriented multilayer polyester film (application claims 13-14); and the use of regrind material (application claim 15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the relative thicknesses of the layers of the film claimed in the above patent as indicated in claims 1, 3 depending on the specific mechanical, barrier, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. It also would have been obvious to select the PEN content and thicknesses of the film layers, in addition to other barrier enhancing techniques, in order to obtain the necessary oxygen barrier properties for a specific usage. One of ordinary skill in the art would have incorporated additional layers such as an intermediate adhesive or bonding layer in order to obtain high adhesion between the outer and base layers as indicated in claims 6-8. It is well known in the art to use pigments in film to obtain a desired coloration as indicated in claim 9. One of ordinary skill in the art would have selected the orientation and heat-setting conditions of the film as indicated in claims 13-14 in order to obtain the desired mechanical and thermal properties for specific usages.

***Claim Rejections - 35 USC § 103***

10. Claims 1, 3-4, 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over:
- (a) PEIFFER ET AL (US 5,955,181); or
  - (b) PEIFFER ET AL (US 6,054,212); or



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(c) EUROPEAN PATENT APPLICATIONS 0878298 A2 *or* 0878297 A2 (hereinafter EP '298 and EP '297, respectively); or

(e) EUROPEAN PATENT APPLICATIONS 0945256 A2 *or* 0945259 A2 *or* 0945261 A2 *or* 0945262 A2 *or* 0945263 A2 (hereinafter EP '256, EP '259, EP '261, EP '262, EP '262, respectively), or combinations of the above references.

Due to the number and duplicative nature of the references, citations to specific portions of individual reference have been omitted.

Each of the above references disclose a biaxially oriented multilayer polyester film having a base layers, outer layers, wherein one outer layer has the recited PEN and PET content, and the film having the recited relative Tg values. The reference further disclose other recited features such as oxygen permeability, a method of making, use of intermediate layers, relative proportions of layers, and other features as recited in claims 1, 4, 6-15, wherein the films are further coated and/or metallized. Features not explicitly disclosed in a given reference are either well known in the art or are suggested by one of the other above references, since all the above references are directed to very similar inventions (e.g., biaxially oriented multilayer polyester films with specific PEN and PET contents in the outer layer and with specific Tg relationships between layers, etc.).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the relative thicknesses of the various layers of the films disclosed in the above references as indicated in claims 1, 3 depending on the specific mechanical, barrier, optical, and/or surface properties required for a given application in addition to economic

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considerations based on material costs. It also would have been obvious to select the PEN content of the film layers to obtain the desired oxygen barrier properties for a specific usage.

11. Claims 1, 3-4, 6-15 are rejected under 35 U.S.C. 103(a) as being obvious over PEIFFER ET AL (US 6,149,995) as set forth in the previous Office Action.

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

The above reference discloses a biaxially oriented multilayer polyester film having a base layers, outer layers, wherein one outer layer has the recited PEN and PET content, and the film

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having the recited relative Tg values. The reference further disclose other recited features such as oxygen permeability, a method of making, use of intermediate layers, relative proportions of layers, and other features as recited in claims 1, 4, 6-15, wherein the films are further coated and/or metallized.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the relative thicknesses of the various layers of the films disclosed in the above reference as indicated in claims 1, 3 depending on the specific mechanical, barrier, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. It also would have been obvious to select the PEN content of the film layers to obtain the desired oxygen barrier properties for a specific usage.

***Allowable Subject Matter***

12. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose or suggest or claim a film having the recited outer layer composition, thickness, and interlayer adhesion (claim 5).

***Response to Arguments***

14. Applicant's arguments filed 12/16/2002 and 6/27/2003 have been fully considered but they are not persuasive.

(A) Applicant argues that the prior art and double patenting references fail to specifically disclose or claim applicant's invention because the prior art films have outer layers which can contain up to 60 wt% PET. However, it must also be noted that the references generally use the language "optionally up to" the maximum amount, which encompasses and reads on Applicant's claimed amounts of up to 9 wt% PET, thereby establishing a prima facie case of obviousness.

(B) Applicant argues that the prior art and double patenting references fail to specifically disclose the claimed invention containing the recited amount of ethylene-2,6-naphthalate units in the outer layer and further argues that the claimed amount of ethylene-2,6-naphthalate units in the outer layer is critical for obtaining superior interlayer adhesion. However, while the examples in the specification indicate some degree of improved interlayer adhesion between layers when the outer layer *consists of* 95-97 wt% PEN and 3-5 wt% PET, and where the base layer *consists of* 100 wt% PET, the alleged showing of unexpected results and/or criticality provided by the specification is not commensurate in scope with the present claims, particularly in regard to the specific composition of the outer layer (e.g., the proportion of PEN and PET units in the outer layer) and the composition of the base layer.

The Examiner further notes that the Example 1 is confusing as to the composition of the base layer (i.e., adding up to 170 wt%), and therefore the Examiner is unable to determine the scope of the showing with respect to the composition of the base layer.

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(C) Applicant argues that there is no motivation for one of ordinary skill in the art to increase or maximize interlayer adhesion in the films of the prior art. This argument and the associated Declaration filed 6/30/2003 is deemed moot in view of the new grounds of rejection and the indication of allowable subject matter in claim 4.

(D) Applicant argues that the recited proportion of the outer layer in the film is critical. However, it is the Examiner's position that one of ordinary skill in the art is capable of readily determining the optimum thickness of individual layers in a laminate film based on basic cost-benefit analysis taking into account the different costs and known properties of individual materials, as well as the specific barrier and mechanical properties required by a given application. Applicant has not provided any probative evidence of unexpected results or criticality from the recited amount of outer layer in the film commensurate in scope with the present claims.

(E) In regards to the obvious typographical error in the rejection of paragraph 9 (page 5) of the previous Office Action, the Examiner regrets any confusion caused. However, given the duplicative nature and number of references involved, the Examiner respectfully suggests that Applicant call the Examiner for clarification if he encounters any further confusing or apparent errors (typographical or otherwise) in the present Office Action in order to expedite prosecution.

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*Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (703) 305-3551. The examiner can normally be reached on Monday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (for non-after finals) and (703) 872-9311 (for after-finals).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

July 30, 2003



Vivian Chen  
Primary Examiner  
Art Unit 1773